

ABSTRACT OF THE DISCLOSURE

A small form factor transceiver module that incorporates an externally modulated laser (EML). The transceiver module has a transmitter optical subassembly with a header assembly having a base with a platform extending through. The platform has a plurality of conductive traces extending through the platform for making connections on both sides of the base. A thermoelectric cooler (TEC) is used to dissipate heat from a laser within the header assembly. The TEC dissipates heat sufficiently to allow the EML to be used in the header assembly. In this manner, EMLs can be used in relatively small optical devices, including small form factor transceivers that comply with the XFP standard. The XFP modules with EMLs can be used for longer links than XFPs without EMLs. In addition, EMLs can be stabilized using TECs so that XFP modules can be used for DWDM-type applications.

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